



City of Kingman, Arizona

Classification: Electrician – Streets – Traffic Control/Signage

Department: Public Works

Accountable To: Crew Leader or Streets Superintendent,

Created/Revised Date: November 2015

FLSA Status: Non-Exempt **Salary Grade:** 209 **Band:** B **EEO4:** 7

GENERAL DESCRIPTION OF POSITION

Performs journey trades work in the installation, maintenance and repair of electrical devices and equipment. The fundamental reason this classification exists is to perform skilled level electrical work involving installation, inspection, maintenance, alteration and repairs of electronic traffic control signals and devices, pole-mounted outdoor lighting, associated mechanical equipment and solid-state traffic control devices in accordance with standard practices of the electrical trade. Maintains an on-call status to ensure the safe operation of the traffic signals, traffic control devices, and City lighting systems; performs other duties as required within the scope of the classification.

SUPERVISION RECEIVED

Work is performed with considerable independence under the general supervision of a crewleader or superintendent. Work is reviewed for results obtained and for conformance with technical standards.

SUPERVISION EXERCISED

May provide instruction and advice to other employees on an assignment basis. May supervise temporary employees, community service workers, and DOC Inmate workers as directed, or as assigned by Superintendent.

ESSENTIAL DUTIES & RESPONSIBILITIES Essential Functions are not intended to be an exhaustive list of all responsibilities, duties and skills. They are intended to be accurate summaries of what the job classification involves and what is required to perform it.

- Diagnoses and repairs traffic signal systems using hand tools, power tools, and electrical diagnostic equipment; performs repairs on poles, signal heads, signs, vehicle sensors, cabinet-electronics and microprocessors, switches, communications, timing and all other subsystems; diagnoses and prioritizes the steps necessary for each situation and executes repairs.
- Installs, alters, maintains, diagnoses, and repairs electrical wiring systems and equipment, both high and low voltage (i.e., traffic signal systems, traffic control devices, electrical boxes, motors, streetlights, and other electronic appliances and housings).
- Locates short and open circuit conditions in wiring systems.
- Replaces worn and/or damaged components in traffic control devices and electrical streetlight fixtures.
- Installs and maintains electrical motors, signal heads, signal cables, span wire, and traffic signal poles and pedestals.
- Performs electronics repair work on a wide variety of electronic equipment.
- Inspects defective electronic equipment to determine malfunctions.
- Reads and interprets blueprints, schematic diagrams, logic charts, and manufacturer's manuals to isolate malfunctioning components.
- Performs scheduled preventative maintenance on traffic signals and street lighting through visual inspections, hardware and software equipment replacement, group re-lamping, and equipment testing.
- Documents information on preventive maintenance file on electrical equipment and machinery and monitors a preventative maintenance program.
- Operates aerial equipment and pneumatic equipment in the installation and repair of electrical equipment.

- Participates in the blueprint plan review process for lighting and signal projects
- Responds to emergency call outs.
- Operates crane truck for removal and placement of poles and equipment.
- Operates a bucket truck for aerial work.
- Replenishes electrical parts and supplies.
- Maintains parts inventory.
- Performs construction and maintenance work as needed or assigned.
- Performs mechanical repairs on industrial and automotive equipment as required.
- Cleans and maintains tools and equipment.
- Performs all duties in conformance to appropriate safety and security standards.
- Supervises and leads DOC Inmate Labor as trained and assigned.
- Communicates and acts in a professional manner with the public, co-workers, and work contacts.
- Provides excellent customer service to all contacts.
- Regular attendance is an essential function of this job to ensure continuity.
- May be required to work early mornings, evenings, nights, holidays or weekends as needed.
- Performs all work duties and activities in accordance with City policies and procedures; follows safety policies and practices, works in a safe manner, and reports unsafe activity and conditions.
- Performs related work as required.

PERIPHERAL DUTIES:

- Maintains effective contact with other city departments when making electrical repairs.
- Maintains effective contact with vendors to obtain electrical parts and supplies.
- Performs related duties as required.
- Performs special assignments as requested.
- May serve on a variety of employee committees.
- Performs electrical maintenance of city buildings as needed.

DESIRED MINIMUM QUALIFICATIONS:

Education and experience:

- Graduation from high school diploma or GED equivalent supplemented by technical/trade school coursework or apprenticeship in electrical trades work.
- Completion of a recognized four year electrical apprenticeship program, or equivalent training, or three years of experience as a skilled electrician/Traffic Signal Technician. Other combinations of experience and education that meet the minimum requirements may be substituted.
- Any combination of experience and training which demonstrates the knowledge and experience to perform the work.

Necessary Knowledge, Skills and Abilities:

Knowledge: Thorough knowledge and skill in use of methods, materials and tools used in electrical construction and maintenance work, including installation of all sizes of electrical conduit, cables, wires, switches, automatic starting equipment, and pole line construction; Occupational hazards and necessary safety precautions of the trade; National Electric Code and relevant City codes; Considerable knowledge of the principles of electrical theory as applied to electrical circuits and wiring systems and ability to apply this knowledge to work situations; Working knowledge of the methods, procedures, materials, and tools related to the maintenance and installation of electrically operated traffic control devices, electro-mechanic traffic control devices, and electricity as it relates to traffic control devices; Principles and theories of electronics as related to the repair of digital electronic traffic control devices; Test equipment and testing procedures used in the calibration and repair of digital and analog electronic equipment; Work zone traffic control signing and flagging in accordance with MUTCD standards.

Skills: Skill in performing journey-level trades electrical installation and maintenance and locating and adjusting faulty or defective electrical systems and equipment; Care and use of hand tools and equipment necessary to perform various electrical repair tasks in a safe and effective manner; Identifying maintenance needs and mechanical and electrical problems and correcting or referring for repair; Troubleshooting problems; Preparing and maintaining accurate records;

Working in a team environment; Providing customer service; and Communication, interpersonal skills as applied to interaction with coworkers, supervisor, the general public, etc. sufficient to exchange or convey information and to receive work direction; Application of first aid methods including artificial respiration.

Abilities: Ability to read, interpret, and analyze applicable federal, state, and city codes, Traffic Signal and Pole Lighting manuals, industry periodicals and electrical diagrams, schematics, blueprints, specifications and sketches; Install, inspect, maintain and repair traffic signal and pole-mounted outdoor lighting; Perform electrical system diagnostics; operate and work from an aerial bucket truck; Work at heights greater than 10 feet; Work according to prescribed safety and professional standards; Direct jobs safely, efficiently and economically; Understand and follow complex oral and written instructions; Work under varying weather conditions; Perform basic mathematical calculations; Respond to after hours and emergency calls after normal working hours and on weekends and holidays; Distinguish between the full range of colors in the color spectrum to work with electrical wires, electronic components, traffic signal and street lights; Work safely without presenting a direct threat to self or others; Observe and adhere to proper safety precautions; Establish effective, cooperative working relationships with other employees, supervisors and the public; Wear OSHA required personal protective equipment including safety restraints, hard hat.

SPECIAL REQUIREMENTS

- Valid Arizona Commercial Driver's License at a minimum level of Class B or ability to obtain one within six (6) months of hire to position.
- May require certification or demonstrated competence as electrician
- Possess Level One International Municipal Signal Association (IMSA) Traffic Signal Certification within one (1) year of hire to position.
- Based on assignment, may be required to participate and obtain NIMS (National Incident Management System) training certifications.

WORK ENVIRONMENT

The work environment characteristics attached to the job description are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. See Physical Demands.

Expected Behavior/Quality of Services:

Excellence is the responsibility of everyone at the City of Kingman. We lead by our core values in constant pursuit of excellence:

Commitment – Dedicate oneself to consistent and excellent public service.

Innovation – Implement unique, creative and cost-effective solutions.

Communication – Communicate in a positive, honest and productive manner.

Integrity – Adherence to high ethical standards.

Diversity – Promote inclusiveness and impartiality throughout the organization.

Personal Responsibility – Take initiative to achieve excellence and accept accountability, uphold confidentiality, know when to report indiscretions and inappropriate actions even when it may be uncomfortable to do so, take responsibility for your work environment.

Respect – Demonstrate a high regard for others, support each other.

Teamwork – Promote and encourage cooperative efforts, open communication and trust, encourage positive feedback.

All City employees are expected to conduct themselves consistent and in support with the above values.

SELECTION GUIDELINES:

Submittal/review of employment applications, screening/rating of application in relation to training and experience to job description and overall presentation and job history/stability, oral interview, reference and background check. Supplemental job related tests may be required.

DISCLAIMER:

The above statements are intended to describe the general nature and level of work being performed by individuals assigned to this position. They are not intended to be an exhaustive list of all responsibilities, duties, and skills required of personnel in this position. This job description is subject to change as the needs and requirements of the position changes.

EMPLOYEE SIGN OFF:

I have read through the job description and have a good understanding of the requirements for my performance in this position and find it to be an accurate description of the demands of this position. I acknowledge it is incumbent upon me to seek clarification from my supervisor/manager for any questions I may have regarding the requirement/responsibilities of my position. I also acknowledge that I can fulfill the essential functions of my position. Should I need to seek reasonable accommodations, I acknowledge I will contact my supervisor/manager or Human Resources to pursue options.

Employee Signature:_____ **Date:**_____

Employee Printed Name:_____